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STRANGULATED INGUINAL HERNIA.

[Communicated for the Boston Medical and Surgical Journal.]

Mr. Editor,—The following operation for strangulated direct inguinal hernia, interesting by reason of the tightness of the stricture, its obstinate resistance to all means and appliances of a medical nature, and the rapid and entire recovery of the patient, is cheerfully submitted to your Journal for record.

The patient, A. M., of this town, aged about 30, of nervous temperament and scrofulous diathesis, with a spinal curvature, was "breached" on the right side several years since, as he says, by heavy lifting. Has worn a truss constantly, nights excepted. Small protrusions have occurred many times, which he has readily reduced without professional aid. On the night of Sept. 26th last, at the cry of fire, patient rose from his bed and hastened away, forgetting to apply his truss. While running rapidly to the scene of conflagration, the hernial sac protruded, and remained so three or four hours; during which time he was actively and laboriously engaged, till the severity of abdominal pain necessitated a hasty retreat bedward, where I found him in intense agony. Hot appliances, local and general, were immediately tried, to aid in the taxis, but without any perceptible impression. Ice was suggested, but could not be obtained without considerable delay. Sulphuric ether was then administered, and *perfect anæsthesia maintained for nearly three hours,* with occasional attempts at reduction; the patient being kept some of the time on an inclined plane, with the head downward. This also failed. No diminution whatever was effected in the size of the tumor. The opening into the inguinal canal, which could at times be felt by the point of the finger, was exceedingly small. The tumor was of the usual shape, and of the size of a large orange.

The customary operation was now determined on, and performed by myself as rapidly as possible, the patient being still under ether. The intestine was found of a dark livid color, but nowhere sphacelated; distended with air and some fæcal matter. No ligatures were necessary. The wound was approximated by the interrupted suture; and a dressing of water with a graduated compress applied, retained by a spica bandage. As soon as consciousness returned, the patient was given pulv. opii gr. i. in pill; which was repeated every three hours for four days. The diet prescribed was one half a teacupful of cream three times daily, gradually increased, for one week, when the patient began to resume his ordinary diet. The wound healed mostly by first intention.

Two weeks from the time of operation, patient left his bed, and walked quite readily about the house; and in a few days more entered upon his customary business. There has been no swelling or protuberance since the operation, and the truss is only worn while walking.

I am thoroughly convinced, by long and repeated trials in the reduction of hernia, that the ring of tissue forming the constriction is not susceptible of dilatation or relaxation, by means purely medical; and that all measures, in order to be successful, should have reference to lessening the size of the tumor—and to this end, I consider *cold* very effectual.

A short time after this operation, I had the good fortune to perform another of the same kind, on that almost constant attendant of the medical man in active practice—the horse. This operation was very successful, and the breach apparently cured; the patient now being able to do good service on the road. No ether was used in this case, owing to the fact that I had not a sufficient quantity on hand; which I very much regret, as this was a good opportunity to test the power of that favorite anæsthetic.

Respectfully yours, George G. Tucker, M.D.

Westfield, Mass., Dec. 8th, 1862.

ANGINA PECTORIS.

[A paper read before the Royal Medical Society of Edinburgh, Scotland, on the 28th of March, 1861, by Francis Wayland Campbell, M.D. (McGill College), L.R.C.P., London, &c. &c.]

Mr. President and Gentlemen,—In attempting, this evening, to draw your attention for a few moments to a disease of such great importance as "Angina Pectoris," I do so more in the hope that on the conclusion of my remarks, the members of this Society will freely state what has been their experience, than of adducing anything particularly new or startling concerning an affection the pathology of which is still disputed by the most eminent authorities of the day. Fortunately for the human family, this disease is of comparatively rare occurrence—yet, it was my good fortune that the first case of importance that I was called to attend, after my graduation, was a genuine case of "angina pectoris." As it will form the subject of a portion of the following remarks, I will now proceed to detail it.

On the 4th of July, 1860, I was sent for in great haste to visit James S., a colorer and whitewasher, aged 54, who, I was informed, shortly after taking a hearty dinner, was seized with a violent pain in the region of the stomach. When I arrived at his dwelling, I found the pain had entirely disappeared, and he was comparatively well. His bowels being torpid, I ordered ten grains of blue pill to be taken at bed-time, and a seidlitz powder in the morning; and left instructions, should the pain trouble him again, to apply a sinapism over the affected region. On the following day, I again visited him, and was informed that twice during the night he had had a paroxysm of pain, which the sinapisms failed to relieve. Having made minute inquiries into the man's habits, I found that he indulged rather freely in liquor; this, with the fact that the two attacks he suffered from during the night were accompanied by a desire to vomit, led me to order a blister over the epigastrium. On the 6th, he said he was rather better, the blister having lessened the intensity and frequency of the paroxysms.

On the 7th, he was, to use his own expression, "much worse," having had this morning two severe paroxysms. This time he referred the seat of pain to the region of the heart, and described it as agony the most intense, rendering him almost unable to breathe. It came on suddenly, shooting to the back of the neck, then down both arms, lasting about twenty minutes, and gradually passing off. Clearly now I had a case of "angina pectoris." On examining the cardiac region, I detected, on close attention, a faint and almost imperceptible murmur with the first sound of the heart. I prescribed gr. xv. of Dover's powder every four hours, and a tablespoonful of the following mixture every two hours: ℞. Spts. eth. sulph. comp., spts. ammon. arom., aa ℥ ss.; tinct. hyoscyam., ʒ iij.; aquæ ad ℥ vi. On the morning of the 8th, he walked to my surgery, and asked me to repeat the powders, as they had done him a great amount of good. Had, the previous night, only one paroxysm, which was mild in character compared to those which preceded. On the 9th of July, I visited him about noon; he felt himself improving, and was in much better spirits; wished to go out to attend to some business, which I forbade. Same medicines continued. About half past 7 o'clock, contrary to instructions, he attempted to cross the street to a neighbor's house, when he was seized with a severer paroxysm than any of the preceding, so much so, that he was unable to return home without assistance. As he was thought to be dying, I was sent for in great haste. I found him trembling violently, and his body covered with cold perspiration; the pulse was small and frequent, and the countenance exhibited extreme anxiety. A little brandy was ordered, otherwise to continue as before. About 9 o'clock I saw him with Dr. Craik, in consultation, when matters were found much as reported on the 7th. While we were in the room, a paroxysm came on, and, on placing the stethoscope over the heart, a loud systolic murmur was heard—also a very distinct and harsh diastolic bruit; both these sounds were heard over the aortic valves, but were inaudible at the apex. All previous medicines were stopped, and the following ordered: ℞. Tinct. valerian. ammon., ʒ vi.; spts. eth. sulph. comp., ℥ ss.; tinct. opii, ʒ ij.; aquæ ad ℥ vi. Take ℥ ss. every three hours. It was determined to try the hypodermic injection, should we again find him in a paroxysm. On the 10th, he felt easier, and a few moments before I arrived on the 11th, he was attacked with a paroxysm, which was on when I entered. The physical signs were precisely as noted on the 9th. I injected seven drops of Tilden's fluid extract of belladonna, and twenty drops of liquor opii sedativus (Battley's) hypodermically, which failed to give any relief or affect him in the slightest, and the paroxysm passed off as previously.

12th July.—Dr. Craik met me in consultation to-day. Has had several severe attacks since last visit. We felt inclined again to try the effect of the hypodermic injection, but he positively refused to submit; he begged to be cupped, which I accordingly did, and obtained about six ounces of blood. 13th July.—Has found more relief from the cupping than from anything else. Asked to have it repeated, which was accordingly done. On the following day he felt himself so much better that it was with difficulty that he could be persuaded to remain at home. 15th July.—On making my visit today, I found that in the morning he had had a slight attack, which he attributed to some exertion he had made. Visited him at 8, P.M.; felt quite well, was sitting chatting with some friends. No paroxysm since the morning. 16th July.—About three o'clock this morning, he suddenly awoke his wife, saying he had another attack. He then called for his medicine. She got up, lit a candle, despatched a messenger for me, and brought the bottle to him. He raised his head to take some of it, when he suddenly placed his hand over his heart, his head fell back, and without a struggle he died.

A *post-mortem* examination was made about 13 hours after death. The countenance was tranquil, and the cadaveric rigidity extreme. The heart was considerably enlarged and fatty. On the surface were two milky patches, about an inch in diameter, and each of the cavities contained a small quantity of blood. The mitral and tricuspid valves were healthy. On the free surface of the aortic valves, ossific matter was deposited, as well as upon the whole surface of the arch, rendering the parts rough and gritty to the finger. At the aorta, between two of the valves, was a triangular spot, about three eighths of an inch in diameter, which projected to the extent of one tenth of an inch into the calibre of the artery, and no doubt contributed to cause the murmur which had been diagnosticated before death. No other lesion of the heart was discovered, and all the other organs were healthy, with the exception of the liver, which, as might have been anticipated, by the man's habits, was considerably enlarged.

This, gentlemen, terminates the history of a case which, to me, was full of interest. Doubtless it is not as fully reported as one more experienced would have done, still I hope that, in some points at least, it is instructive. As a general rule, "angina pectoris" does not terminate fatally so rapidly, as in the case just detailed, for Stokes records a case where the patient suffered for ten years from aggravated symptoms of this disease. Indeed, so far as time and the means at my command allowed, I have been able to find but one recorded case which proved fatal in a shorter period, which is given by Latham, and was that of Dr. Arnold, the head master of the School at Rugby. Others may have occurred—may be reported—but they can be but few, for Dr. Begbie of this city, Professor of Practice of Medicine in the College of Surgeons, whose means of inquiring are of course great, a few weeks ago, while lecturing on "angina pectoris," was pleased to quote my case, as an example of an extremely rapid termination of the disease. Previous to my being called to attend this man, he had enjoyed remarkably good health, for a period of twenty years not having a bodily ache of any kind. The quick succession of attacks which he suffered from, was another peculiarity in the case, while no exciting cause could possibly be ascertained. In almost all the cases which I have read, weeks and months as a rule intervened between the paroxysms; while my patient had three and four in one day, the fatal termination ensuing upon the twelfth day from the first attack. It is deeply to be regretted that concerning a disease so interesting as the one under consideration, of late years but little has been done towards its investigation. In such works as Walshe, Stokes, and Latham, we find that a few pages contain all these justly celebrated authors have to say on the subject. It is, I say, to be regretted; for of late years the microscope has thrown such a vast amount of light upon hitherto obscure affections, that I cannot resist the temptation of believing that if those who from their extensive field of observation are likely to have cases of "angina pectoris" come under their notice, would patiently investigate the subject with the aid of that valuable instrument, the darkness and uncertainty which now surrounds it would soon pass away. As it is now, we have to go back to the year 1799, since which time but little advance has been made in our knowledge of this disease. In that year, Dr. Parry, a member of this Society, published a work entitled "An inquiry into the Symptoms and Causes of Syncope Anginosa," and to this day it is unquestionably the best monograph that we possess on the subject, and the theory then advanced by him I will presently attempt to show is the one most supported by pathological observation. One fact concerning the disease we may, however, take as established, and that is, true "angina" never occurs without organic disease of the heart or arteries in its vicinity. It is true, cases are recorded in which no traces of organic disease were observed. Concerning such cases Dr. Stokes (and I must believe he is correct) says: "It is more probable that in the cases so described, the disease was overlooked, than that the heart was perfectly sound." He then goes on to say, "that such cases as were observed before the application of the microscope to pathological anatomy, may be set aside as proving the existence of 'angina' without organic change; for among the most important uses of histological research, is the discovery of those early stages of organic change which escape the unassisted eye." Dr. Walshe on the same subject says, "It has occurred to me to examine during life some six or eight cases of true 'angina'; in every one there were signs of organic disease. I have opened or seen opened the bodies of three persons destroyed in the paroxysms; the heart was texturally affected in all." The forms of organic disease present, as enumerated by Latham, are as follows:—1st, weakness and attenuation; 2d, weakness with fatty degeneration; 3d, some form of valvular disease, generally affecting the left side; 4th, disease of the aorta, with or without obstruction of the coronary arteries. If we analyze closely the various cases which have been recorded, it will be found that in the great majority of instances, the organic disease present was weakness with attenuation of the walls of the heart, or weakness with fatty degeneration, the coronary arteries as a rule being ossified (and as in the case detailed, the ossification extending frequently to the aorta and valves), and if not truly in an ossified condition, at least a cartilaginous formation being found in their interior. If the coronary arteries are found in the condition I have just named, it need not, I think, excite our amazement, if we find the heart itself in a weakened condition; for just in proportion as these arteries vary from their normal state will the nutrition of the heart be impaired. If the calibre of the artery is in the slightest degree diminished, the required amount of blood will not reach the great arterial centre, the result being a weakening of the muscular fibres. I believe, then, that as a general rule, in all true cases of "angina pectoris," the coronary arteries will be found diseased. Having made this strong assertion, it may surprise the members of this Society somewhat, that in the case which came under my care not one word about the coronary arteries appears in the *post-mortem* examination. You cannot regret it more than I do, but it could not be avoided. It was with great difficulty that I succeeded in getting the friends to consent to such an examination, and before it was completed to our satisfaction, the friends entered and would not allow us to proceed further. Unfortunately the examination of the coronary arteries had been postponed till the last, but from hurriedly passing my finger over them, I can with certainty say, they felt as if ossified, and in my own mind I have no doubt but they were.

It will be remembered that the heart of this man was enlarged and fatty. The hypertrophy can easily be accounted for from the man's occupation, which was of such a character as to constantly keep the heart in an excited condition. It is very probable that he may have suffered, unknowingly, from this disease for many years; the fatty condition, judging from its extent, being of comparatively recent date. My opinion is, that had the man lived a few years longer, the hypertrophy would have in a great measure disappeared; while the muscular fibres of the heart to the naked eye—but more so under the field of the microscope—would have presented, in a very marked degree, the characteristic signs of weakness, the fatty transformation in the mean time gradually increasing. I have previously mentioned a case, recorded by Stokes, of a patient suffering ten years from "angina pectoris," and here the *post mortem* revealed vast hypertrophy, which was believed to have been secondary to an attact of "endo-pericarditis." I regret that in this case not a word is said regarding the condition of the coronary arteries; still, however, I am forced to believe they must have been in an abnormal condition, sufficient to interfere with the proper nutrition of the heart, for I find that digitalis—a most valuable remedy in the treatment of hypertrophy—was sure to aggravate his distress; saline purgatives did the same. Now surely, if the hypertrophied heart was in this case, as is the rule, receiving an amount of blood equal to the increased duty which it was called upon to perform, digitalis would have been the remedy above all others selected to benefit the patient. On the contrary, he always received the greatest possible benefit from the employment of stimulants, as a rule contra-indicated in hypertrophy, his allowance being for many years eighteen tumblers of punch daily. The effect of these two directly opposite modes of treatment goes strongly, I think, to prove that the muscular fibres of the heart were in an excessively weakened condition. Hypertrophy in "angina pectoris" seems to be extremely rare. In addition to my own case, the only other I have been able to lay my hands upon (having used your magnificent library) is the one I have quoted from Dr. Stokes, and if we will not admit that the fibres are degenerated, it will be somewhat of a difficult task to account for the sudden death of Dr. Stokes's patient, which he himself says was by syncope. Before taking leave of this case, I may as well mention that none of the salts of morphia, or even the black drop, except in *very large* doses, produced the desired effect.

Having thus touched upon a few of the leading facts connected with this disease, we will now pass on to consider the real and important question at issue, what is "angina pectoris"? I have mentioned the different varieties of organic lesion which are found in and around the heart; but as all these changes exist and prove fatal without any symptoms of "angina," "the conclusion is unavoidable," says Walshe, "that there is something beyond organic mischief concerned in generating the paroxysm." What that is, I will now try to show. I may fail; if I do so, I fail in a good cause. Walshe, with Latham and others, allies it to the nervous group, stating it to be spasm of the heart; while Stokes, with Parry, who is still the great authority on this disease, considers the pathological condition during the paroxysm to be a diminution of the muscular power of the heart; and, from what I have already stated, you know that this is the theory, which, to my mind, seems to be most strongly supported by facts. First, however, we will see what arguments the supporters of the spasmodic theory have to adduce. Walshe says that its spasmodic character appears from its sudden advent and departure; from the character and intensity of the suffering; from the perfect ease enjoyed in the interval of seizure: and from the kind of treatment that proves beneficial. Latham urges more strongly than the preceding authority its spasmodic character. He refers the pain, and the dying sensation felt by the patient, to spasm. Certainly these arguments appear strong, but, if we have recourse to facts, we find the theory advanced by Parry, and more recently endorsed by Stokes—that the attack depends upon a weakened condition of the heart, the blood arriving at that organ faster than it is able to propel it onward—is the one most supported by them. Thus females, notoriously more liable to diseases of a spasmodic character than males, enjoy almost a complete immunity from it; indeed, I consider it very doubtful if the few cases that are mentioned as occurring in women were genuine attacks of angina pectoris. It nearly always occurs in men above the age of fifty (a period of life peculiarly prone to ossification of the arteries) and of a leuco-phlegmatic habit of body, and there is not the slightest evidence to show that after a fatal paroxysm of angina, the heart has been found in a spasmodically contracted condition, although this condition has been found after death from other causes, such as tetanus or decapitation. In my own case, although the muscular system generally was in a state of extreme rigidity, the heart, so far from being spasmodically contracted, was more flaccid than usual, and contained blood in all its cavities. The walls of the organ were attenuated, and in a state of fatty degeneration, two conditions not at all favorable to spasm, but eminently so to failure of muscular power. If angina was due to spasm, should we not expect to find, and *should we not* find the heart firmly contracted? Again, if it was spasm, would not the circulation be interrupted, in fact totally stopped, which we certainly know is not the case. On the contrary, we find that the pulse becomes weak the moment the paroxysm sets in, and increases in weakness just in proportion to the duration of the attack. Dr. Parry, in his admirable work, mentions the case of a patient who was under his care for a lengthened period, who permitted the Doctor to accompany him during a walk up hill, in order that he might witness what occurred during a paroxysm of angina. Dr. Parry says, "when the fit was thus excited, I could perceive no symptoms of disorder in addition to the uneasiness at the breast, except a *gradual* and most *evident diminution* of the strength of the pulse, and I have no doubt that we shall invariably find the pulse become weaker in proportion to the intensity of the paroxysm." Dr. Wall also mentions a case where the pulse was never *irregular*, but *always small*, gradually sinking as the paroxysm increased. Can we account for this state of things on the theory of spasm?

I think not; yet it seems to me no difficult matter to account for them if we only admit the weakened condition of the muscular fibres of the heart. The cold perspiration, which is so frequently seen in a paroxysm of any duration, is easily explained by the gradual failure of the circulation, and the intense anxiety of mind under which the patient labors. Many patients complain that, when in the paroxysm, they have the terrible feeling that to take a full inspiration would cause instantaneous death, yet that it is only a feeling is proved by a case mentioned by Parry. A gentleman had this terrible feeling, yet when he could muster sufficient courage to take a deep and full inspiration, he found the *greatest possible relief* from it. May we not account for this by the expanding lung pressing against the gradually distending heart, and thus assisting it in its getting rid of the accumulating blood? Taking a deep inspiration, and retaining the breath, affords relief from this feeling so long as the lung is expanded. This can, I think, be accounted for in the same way. Added to the weakened condition of the heart, is, as I have said before, often found ossification of the large vessels or valves about the heart, which will prevent the free evacuation of the blood from the cavities, and in this way assist in dilating them; and I think we can easily understand how the elasticity or living force of an organ like the heart may be overcome by extreme distension. Hence, though a heart diseased may be fit for the purposes of common circulation during a state of bodily and mental tranquillity, and of health otherwise good, yet, when any unusual exertion is required, its powers may fail under the new demand; accordingly, we find that "angina" is readily excited by those passions, the tendency of which is to stimulate the heart to excessive contraction. Thus we find that many of the recorded cases proved fatal while the patient was in a violent transport of anger.

The symptoms of angina are as readily accounted for on this theory, for the pain may be due to the distension of the heart and large veins; indeed, the increased volume of the heart more readily accounts for the pain shooting along the arms, from pressure upon the nerves, than from any phenomena connected with spasm. Mr. Home, however, attributes the pain to the pressure of the nerves of the heart against the rigid coronary arteries during the paroxysm. The cause of sudden death from angina pectoris, while the patient is asleep, can hardly be accounted for in the same way as I have accounted for a paroxysm. It is more likely, I think, that the patient suddenly starting in his sleep, the blood is driven forward to a heart already in a very weak condition, with such an impetus, that the violent effort it makes to contract and propel the blood onward, is too much for some of its attenuated fibres, and that a minute rupture takes place, causing instantaneous death; the rupture being so minute as to be unobservable to the naked eye. Such is the opinion I have formed regarding sudden death from angina while the patient is asleep. Before closing, I will notice one objection, or rather one more argument, which the supporters of the spasmodic theory may be inclined to adduce. They may say that the spasm may be only sufficient to impede, not destroy the circulation. To this Stokes says it is difficult to understand how such a thing should occur, for a complete spasmodic closure of any one cavity ought to cause death by breaking the continuity of the circulation. As regards the use of opium, it seems to be of but little value, except as a narcotic; if it was likely to benefit as an antispasmodic, surely it would have been of use to my patient when injected hypodermically (at almost the commencement of a paroxysm), the most speedy way of its entering the circulation.

The difference of opinion respecting the condition of the heart during a paroxysm might be overlooked, were it not likely to influence the treatment; but as the treatment of spasm differs materially from that of debility, the disputed point becomes one of some importance. If, for instance, the spasmodic view be adopted, the remedy ought to be found in chloroform; but I have been unable to find any recorded cases in which its administration has been attended with benefit. On the contrary, Dr. Stokes mentions a case of *intercostal neuralgia,* in which the external application of chloroform produced convulsions and collapse, which lasted for many hours. Adopting the other view of the pathology of the disease, the remedies which should be used ought to be stimulants, together with the careful avoidance of all depressing agencies, such as over-exertion of mind and body, ebullitions of temper, sudden surprises, &c. &c. The treatment of course can only be palliative, for the constant concurrence of organic disease precludes the possibility of a permanent cure.

Before closing, I can but express the hope that the next few years may elicit more concerning the pathology of this interesting disease than have the previous sixty-three years.

On the conclusion of the paper an animated discussion took place, which lasted for about two hours, in which Mr. Pettigrew, whose dissections of the heart have elicited so much admiration, Mr. Berryman, assistant to Professor Simpson, Dr. Caffe, Mr. Duncan, Mr. J. Crichton Browne, and numerous others, took part—the majority speaking against the spasmodic theory.—*British American Journal.*

HEALTH OF SCOTLAND.—During the month of September there were registered in the eight principal towns in Scotland the births of 2575 children, 1329 being males and 1246 females. Of these 274 were illegitimate, being 10.6 per cent. The deaths registered during the month were 1754. Of these 870 were males, and 884 females, the rate of mortality being higher than in any previous September registered, except in 1857. The zymotic class of diseases proved fatal to 415 persons, or 23 per cent. of the mortality. The month was characterized by a high barometer; the quantity of rain that fell was, with one exception, the least recorded.—*Lancet.*

Bibliographical Notices.

Stromeyer (Dr. Louis) and Esmarch (Dr. Friedrich) on Gun-shot Injuries. Translated by S. F. Stratham. Philadelphia: J. B. Lippincott & Co. 1862. 12mo. Pp. 120.

The Rebellion, while it has developed the energies of our population in the art of war, has drawn out a series of books—many of them valuable, and some almost worthless—on the subject so new to our medical men, military surgery. The present volume belongs to the former of these classes; it *is* really valuable.

These distinguished Germans, the former Surgeon-in-Chief, and the latter Surgeon of the Schleswig-Holstein army, in the campaign of 1849 against the Danes, give us the result of their valuable experience in a concise, practical way—the former on gun-shot fractures, the latter on resection in gun-shot injuries.

Dr. Stromeyer's article is devoted entirely to gun-shot fractures and the treatment of these injuries. In the early part he describes quite minutely the action of various forms of ball on bone under various circumstances. He advises to dispense entirely with the probe in the examination of gun-shot wounds—the index finger is the natural probe, and that alone can estimate the amount of damage in these cases, with the consequent comminution of bone, opening of joints, tearing of nerves and muscles and other damage; and, indeed, in hardly any case can this style of probe not be made available, except where the finger proves too short to reach the bottom of a sinus. The external wound is almost always smaller than the inner tract, the integuments forming a constriction, which, once passed, offers no farther obstacle to the examination. No patient should be allowed to remain in a hospital twenty-four hours, in cases where a perforating wound has been received, especially if bone has perhaps been injured, without a thorough digital examination, under ether if necessary, to ascertain the exact condition of the parts; otherwise the surgeon must work entirely in the dark, and learn, perhaps too late, that what he thought a simple flesh wound covers thoroughly comminuted bone.

Most of Stromeyer's views on treatment seem very just, and according to the principles of our own schools. He quotes the opinion of another, "those cases proceed the best which are not meddled with." The removal of foreign bodies, rest, antiphlogistic treatment and care for the free escape of pus, are the principles on which he starts. He however advises venesection, a practice not sanctioned in most cases by our surgeons. The remainder of his article is devoted to the consideration of wounds of single bones.

Dr. Esmarch divides his work into two portions—on the injuries of shafts of bones by bullets, and on gun-shot wounds of joints. The general tone of both of these surgeons is conservative, and the satisfactory results, in most of their cases mentioned, testify to the propriety of such a course. Such a course must, it is true, be decided in large part by the peculiar exigencies and circumstances of the war—for we know that while the result of amputation in the Crimea was generally favorable, and of resections unfavorable, the result in the Schleswig-Holstein campaign was exactly reversed—and also by the nature of the case in hand; for, while one would hesitate before exsecting the entire femur, *to save the leg* (as is *reported* to have been done), or removing the entire carpus with an inch of the radius and ulna, for a badly comminuted wrist (as we know to have been advised), can we but shudder at the reckless butchery which we know to have been done in our own service, and may we not rather err on the conservative than the heroic side?

Esmarch asserts that, in a large number of cases, extensive comminution of the larger osseous shafts may be cured without operative interference. Of course the patient must be placed under favorable influences and good treatment. Many owe the loss of limbs simply to careless transport from the field to the hospital. What with rough roads, rude wagons and cruel ambulance drivers, many cases, simple at first, have been rendered complicated; and here let us suggest the use of Smith's anterior splint—now so largely used in our military hospitals—in the transport of men with badly shattered limbs. The action of this is simply, in the first place, to make the comminuted limb *a unit* by suspending it from the splint, and next, to isolate it entirely from all surroundings by slinging it from the top of the ambulance. No other plan, it seems to us, offers so complete isolation and consequent ease. Esmarch's treatment in injuries of the continuity coincides very nearly with that of our own neighborhood and time.

The especial value of this little volume, however, is contained in the article on gun-shot injuries of joints, in which the whole matter of exsection and resection is discussed. To say that the surgeons of this campaign had *a number* of cases of this character would be stating but a part of the truth; in fact, they seemed to strive to bring *all* cases in any way fitted for it, to resection, and their testimony is to that degree valuable, as they have made it so strictly a specialty. While Esmarch considers that active interference should be avoided in injuries of the shaft, if possible, he is convinced that injuries of the joints require operation. The remainder of the book is devoted to the joints; careful directions regarding treatment and operation, and a list of cases, being given.

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BOSTON: THURSDAY, DECEMBER 18, 1862.

FRENCH AMBULANCE KNAPSACKS.—Through the kindness of Dr. J. Mason Warren, we have been permitted to examine three French ambulance knapsacks, which he has recently received from Mr. Turner Sargent, of this city, now resident in Paris. These knapsacks were purchased at the suggestion of Dr. Warren, one of them at his expense and two at the expense of Mr. Sargent, and are intended as gifts for three of our Massachusetts regiments. This knapsack has stood the test of two campaigns of the French army, and may be considered as the best contrivance for the purpose intended which has yet been devised. It is every way superior to that hitherto used in our army. We translate from the *Systéme des Ambulances*, &c., by M. Boudin, the following description of this useful companion of the French military surgeon:—

"A ministerial decree of the 22d of December, 1839, provides that each battalion of infantry shall be supplied with an ambulance knapsack, attached to which is a cylindrical case of tinned iron, fastened with a padlock, and protected by a covering of striped ticking, which is double and water-proof. This cylinder takes the place on top of the knapsack of the covering for the soldier's coat. The whole knapsack conforms in weight and dimensions with that carried by the infantry. It contains the following apparatus:—

"1st. THE CYLINDER.—Contents:—A case containing the following instruments:—1 tourniquet, with a buckle and two pads (Charrière's model); 2 amputating knives, in sheaths, each 22 centimetres long; 1 double-edged knife, in a sheath, 22 centimetres long; 2 straight bistouries, of which one has a narrow blade, with black horn handles; 1 convex bistoury, with a black horn handle; 1 amputating saw (Charrière's pattern); 1 additional saw-blade, very narrow, to take the place of a phalanx saw; 1 pair of artery forceps, with a slide which can be fastened at will; 2 suture needles (Larrey's pattern); 1 ball-forceps, strong (Baudens's pattern), for the extraction of splinters, polypi and all foreign bodies; 1 œsophageal sound, a tube of India rubber tissue of double thickness; 1 whalebone probang, which also answers as a style for the sound; 2 sounds, provided with eyes at the end as well as in their stylets; 1 cylindrical case; 1 covering of water-proof cloth; 1 knapsack of tinned iron, divided into compartments, and fastened with a padlock.

"2d. THE KNAPSACK.—Upper compartment. Contents:—Half a pound of lint; five little sheets of carded cotton, 20 centimetres by 23 centimetres, to be used as lint; 2 medium-sized splints.

"Intermediate compartment. Right case:—11 rolled cotton bandages of different sizes; 5 rolled linen bandages of different sizes; 1 piece of tape, 2 centimetres wide and 8 millimetres long. Left hand case:—Three head-bandages of cotton cloth, of different sizes; 14 cotton compresses of different sizes; 7 linen compresses of different sizes; 1 linen body bandage.

"Drawer, or lower compartment. Right hand cases:—1 flask, with a ground stopper, containing 60 grammes of tincture of sulphuric ether; 1 flask, with a cork stopper, containing 30 grammes of laudanum. Left hand cases:—1 flask, with a glass stopper, containing 60 grammes of camphorated spirit; 1 flask, with a cork stopper, containing 60 grammes of olive oil.

"Middle compartment:—1 tin cup; 1 cupping glass; 1 sponge; 1 square vessel of tin, intended to be used as a wash basin; 1 flask, with ground stopper, containing 30 grammes of aqua ammoniæ; 1 corkscrew; 1 roll of isinglass plaster; 50 pins; 1 piece of wax; 1 wax candle; 1 pencil; 10 needles for sewing; 1 packet of 2 grammes of tartar emetic (each packet containing one decigramme); 1 packet of 4 grammes of sulphate of quinine (in packages of 2 decigrammes); 1 box of friction matches; 1 roll of plaster; 1 piece of oak agaric; 1 ball of grey thread; 1 package of corks to fit the flasks.

"The linen and the instruments are sufficient to dress three wounds of the head, one wound of the chest, and for an amputation of the arm or leg, or to dress about twenty light wounds.

"The chiefs of corps designate the place which the man who carries the ambulance knapsack shall occupy, in marches or military movements, so that he may always be as near as possible to the surgeon."

The knapsack is covered with calf-skin, dressed with the hair on, which is entirely impervious to water. The whole apparatus is remarkable for its compactnesss and durability.

NEW DIET TABLE FOR UNITED STATES MILITARY HOSPITALS.—We print below a new diet table for the Military Hospitals of the United States, which has recently been sent to certain of these institutions for trial for thirty days. It will be seen that it is all that could be desired as to quantity and variety of the articles furnished; indeed, there seems to be a likelihood that there will be in some instances a considerable redundancy in the amount of provisions supplied. As the quantity to be distributed at each meal is definitely given, and the table is to be followed literally for thirty days as an experiment, there can be no departure from it, by crediting any portion of it not needed to the hospital fund. The only alternative of a surgeon who sees good food in danger of being wasted by a literal compliance with the order, is to place some of his patients, who are in a condition to be put on full diet, in a class below. We have recently happened to see, in a hospital which we were visiting, a large quantity of excellent bread, most of which was spread with good butter, which had been rejected in one day by the patients as being more than they could eat. When put in the scales, it was found to weigh nearly sixty pounds! As the new diet table is as yet but an experiment, doubtless such danger of waste will be avoided when it is completed in a permanent form. As it stands, it is only one more evidence of the bounty with which our Government provides for the wants of its sons who are the sufferers from this wicked rebellion. Nothing could more effectually silence anonymous newspaper slanders about the supplies of food to our soldiers in hospital.

ARTICLES COMPOSING THE DIFFERENT DIETS FOR A DAY, AVOIRDUPOIS WEIGHT.

FULL DIET.

Meat	oz.	16
Bread	oz.	18
Potatoes	oz.	8
Other vegetables	oz.	8
Rice, hominy, or Indian meal	oz.	1.60
Salt	gill	0.16
Coffee	oz.	0.80
Tea	oz.	0.12
Sugar	oz.	2.40
Milk	oz.	8
Butter	oz.	1
Flour	oz.	0.25
Molasses	gill.	0.32
Vinegar	gill.	0.32

TUESDAY, *in lieu of Fresh Meat :*

Pork	oz.	8
Beans	gill.	0.64

HALF DIET.

Meal	oz.	8
Bread	oz.	16
Potatoes	oz.	6
Other Vegetables	oz.	6
Rice, hominy, or I. meal	oz.	1.60
Salt	gill.	0.16
Coffee	oz.	0.80
Tea	oz.	0.12
Sugar	oz.	2.40
Milk	oz.	8
Butter	oz.	1
Flour	oz.	0.25
Molasses	gill.	0.32
Vinegar	gill.	0.32

CHICKEN DIET.

Fowl	oz.	12
Bread	oz.	18
Salt	gill.	0.16
Tea	oz.	0.24
Sugar	oz.	2.40
Milk	oz.	3
Butter	oz.	1

LOW DIET.

Meat	oz.	8
Bread	oz.	14
Salt	gill.	0.16
Tea	oz.	0.24
Sugar	oz.	2.40
Milk	oz.	8
Butter	oz.	1
Rice, farina, corn starch, or bread, made into pudd'g,	oz.	2

MILK DIET.

Bread	oz.	14
Rice	oz.	2
Milk	pt.	3
Sugar	oz.	1

BEEF-TEA DIET.

Beef (without bone)	oz.	8
Bread	oz.	12
Salt	gill.	0.32
Tea	oz.	0.24
Sugar	oz.	2
Milk	oz.	4

EXTRA DIET AND DRINKS.

Beef steak.
" essence.
" extract.
Mutton chop.
" broth.
Veal cutlet.
Ham, broiled.
Poultry.
Game.
Eggs.

Fish.
Oysters, raw.
" stewed.
Clam soup.
Vegetables (special).
Milk.
Sugar, white.
Sugar, brown.
Barley.
Cracked wheat.

Gruel, corn meal.
" oat meal.
Farina.
Corn starch.
Tapioca.
Crackers.
Toast.
Chocolate.
Cocoa.
Blanc mange.

Wine jelly.
Custard.
Oranges.
Lemons.
Fruits.
Ice.
Barley-water.
Rice-water.
Jelly-water.
Lemonade.

Wine whey.
Brandy.
Whiskey.
Wine, sherry.
" ——
Porter.
Ale.
Cider.
Milk punch.

FULL DIET.

SUNDAY.

Breakfast.	Coffee	pt.	1
	Bread	oz.	6
	Butter	oz.	½
	Hominy, boiled	oz.	2
	Molasses	gill.	0.32
Dinner.	Roast beef	oz.	16
	Potatoes	oz.	8
	Other vegetables	oz.	8
	Bread	oz.	6
	Rice Pudding.		
Tea.	Tea	pt.	1
	Bread or Crackers	oz.	6
	Cheese	oz.	3

MONDAY.

Breakfast.	Coffee	pt.	1
	Bread	oz.	6
	Butter	oz.	½
	Cold meat	oz.	4
Dinner.	Beef soup	pt.	1½
	" " meat	oz.	12
	Bread	oz.	6
	Potatoes	oz.	8
	Other vegetables	oz.	8
Tea.	Tea	pt.	1
	Bread	oz.	6
	Butter	oz.	½

TUESDAY.

	Coffee	pt.	1
	Bread	oz.	6
	Butter	oz.	½
	Meat hash, with vegetables	oz.	8
	Pork } Baked	oz.	8
	Beans } or in soup	gill.	0.64
	Potatoes	oz.	8
	Other vegetables	oz.	8
	Bread	oz.	6
	Indian Pudding.	oz.	
	Tea	pt.	1
	Bread	oz.	6
	Butter	oz.	½
	Fruit, stewed	oz.	4

WEDNESDAY.

	Coffee	pt.	1
	Bread	oz.	6
	Butter	oz.	½
	Indian meal, boiled	oz.	2
	Molasses	gill.	0.32
	Beef, recently corned, or ham, boiled	oz.	16
	Potatoes	oz.	8
	Other vegetables	oz.	8
	Bread	oz.	6
	Pickles	oz.	1
	Tea	pt.	1
	Bread	oz.	6
	Butter	oz.	½

THURSDAY.

	Coffee	pt.	1
	Bread	oz.	6
	Butter	oz.	½
	Meat hash, with vegetables	oz.	8
	Semi-stewed beef or mutton	oz.	12
	Do. do. soup	pt.	1
	Potatoes	oz.	8
	Other vegetables	oz.	8
	Bread	oz.	6
	Tea	pt.	1
	Bread or crackers	oz.	6
	Cheese	oz.	3

FRIDAY.

	Coffee	pt.	1
	Bread	oz.	6
	Butter	oz.	½
	Fish, fresh or salt	oz.	8
	Cod-fish, in hash	oz.	8
	" with potatoes	oz.	12
	Beets or turnips	oz.	8
	Bread	oz.	6
	Bread pudding.		
	Tea	pt.	1
	Bread	oz.	6
	Butter	oz.	½

SATURDAY.

Breakfast.	Coffee	pt.	1
	Bread	oz.	6
	Butter	oz.	½
	Hominy, boiled	oz.	2
	Molasses	gill.	0.32
Dinner.	Semi-stewed beef or mutton	oz.	12
	Do. do. soup	pt.	1
	Potatoes	oz.	8
	Other vegetables	oz.	8
	Bread	oz.	6
Tea.	Tea	pt.	1
	Bread	oz.	6
	Butter	oz	½
	Fruit, stewed	oz.	4

HALF DIET.

SUNDAY.

Breakfast.	Coffee	pt.	1
	Bread	oz.	6
	Butter	oz.	½
	Indian meal, boiled	oz.	2
	Molasses	oz.	0.32
Dinner.	Beef broth	pt.	1
	" " Meat	oz.	8
	Bread	oz.	4
	Potatoes	oz.	6
	Other vegetables	oz.	6
	Rice pudding.		
Tea.	Tea	pt.	1
	Bread	oz.	6
	Butter	oz.	½

MONDAY.

B'k'f't.	Coffee	pt.	1
	Bread	oz.	6
	Butter	oz.	½
Dinner.	Beef soup	pt.	1
	" " meat	oz.	8
	Bread	oz.	4
	Potatoes	oz.	6
	Other vegetables	oz.	6
Tea.	Tea	pt.	1
	Bread	oz.	6
	Butter	oz.	½

TUESDAY.

	Coffee	pt.	1
	Bread	oz.	6
	Butter	oz.	½
	Hominy, boiled	oz.	2
	Molasses	gill.	0.32
	Mutton or beef broth	pt.	1
	" " meat	oz.	8
	Bread	oz.	4
	Potatoes	oz.	6
	Other vegetables	oz.	6
	Indian pudding.		
	Tea	oz.	1
	Bread	oz.	6
	Butter	oz.	½

WEDNESDAY.

	Coffee	pt.	1
	Bread	oz.	6
	Butter	oz.	½
	Beef soup	pt.	1
	" " meat	oz.	8
	Bread	oz.	4
	Potatoes	oz.	6
	Other vegetables	oz.	6
	Tea	pt.	1
	Bread	oz.	6
	Butter	oz.	½

THURSDAY.

	Coffee	pt.	1
	Bread	oz.	6
	Butter	oz.	½
	Indian meal, boiled	oz.	2
	Molasses	gill.	0.32
	Beef or mutton broth	pt.	1
	" " meat	oz.	8
	Bread	oz.	4
	Potatoes	oz.	6
	Other vegetables	oz.	6
	Tea	pt.	1
	Bread	oz.	6
	Butter	oz.	½

FRIDAY.

	Coffee	pt.	1
	Bread	oz.	6
	Butter	oz.	½
	Cod-fish hash, with potatoes	oz.	8
	Bread	oz.	4
	Vegetables	oz.	6
	Bread pudding.		
	Tea	pt.	1
	Bread	oz.	6
	Butter	oz	½

SATURDAY.

Breakfast.	Coffee	pt.	1
	Bread	oz.	6
	Butter	oz.	½
	Hominy, boiled	oz.	2
	Molasses	gill.	0 32
Dinner.	Beef soup	pt.	1
	" " meat	oz.	8
	Bread	oz.	4
	Potatoes	oz.	6
	Other vegetables	oz.	6
Tea.	Tea	pt.	1
	Bread	oz.	6
	Butter	oz.	½

	CHICKEN DIET.			LOW DIET.		
B'kf't.	Tea	pt.	1	Tea	pt.	1
	Bread	oz.	6	Bread	oz.	5
	Butter	oz.	½	Butter	oz.	½
Dinner.	Chicken	oz.	12	Beef-tea, or mutton or chicken broth	pt.	1
	Or chicken soup	pt.	1	Bread	oz.	4
	Bread	oz.	6	Rice, farina, corn starch, or bread in pudding	oz.	2
Tea.	Tea	pt.	1	Tea	pt.	1
	Bread	oz.	6	Bread	oz.	5
	Butter	oz.	½	Butter	oz.	½

	MILK DIET.			BEEF-TEA DIET.		
B'f't.	Milk	pt.	1	Tea	pt.	1
	Bread	oz.	6	Bread	oz.	4
Dinner.	Rice	oz.	2			
	Milk	pt.	1	Beef-tea	oz	12
	Bread	oz.	4	Bread	oz.	4
	Sugar	oz.	1			
Tea.	Milk	pt.	1	Tea	pt.	1
	Bread	oz.	4	Bread	oz.	4

NOTE.—Medical officers who receive this diet table are directed to adopt it immediately in the hospitals under their charge, and to comply strictly and carefully with its provisions for thirty days, keeping during that time an accurate account of expenditures from the Hospital Fund. At the end of that time they will report the results of this experimental trial, its effects upon the sick and upon the Hospital Fund, and will make such suggestions as they may deem appropriate, the object being to test the practical operation of the diet table, before adopting it as the standard for the General Hospitals.

It is recommended that the diets be prepared according to receipts in the Steward's Manual.

Surgeon-General's Office, October 28, 1862. WM. A. HAMMOND, Surgeon-General U.S.A.

METHOD OF SUPPLYING ARMY SURGEONS.—We are glad to see that the views expressed by the Medical Commission of Massachusetts, in their recent letter to the Surgeon-General, meet with approval elsewhere. The following letter, by E. P. Bennett, M.D., of Danbury, Conn., is addressed to the Editor of the New York *Medical Times*, and is copied from the issue of that work for December 13th.

"SIR,—I noticed in your issue of this week a notice of a letter from several surgeons of Boston, addressed to the Surgeon-General, in reregard to the incompetency of many of the army surgeons. Now when we take into consideration the number of surgeons in the field, and the manner in which they have been appointed, it is not wonderful that such should be the case. As a general thing, the older surgeons have been broken down political hacks, who had no business at home, and therefore could carry with them no practical experience into the army. Then, again, a great proportion of the surgeons are young men. Many of this class are talented and well educated, theoretically, and, under the guidance of men of more mature years, will come to be ornaments to their profession. These young men, I know, would gladly avail themselves of the practical experience of older men. There is also a class of ignorant men, who gained their appointments by political influence, which neither time nor circumstances can alter for the better; they are not capable of improving by experience.

"The remedy suggested by the Bostonians is just the thing wanted, as I am satisfied by actual inspection of a number of hospitals. I have just returned from a visit to the hospitals at Frederick, where I spent three days in visiting the principal hospitals, and in social converse with the gentlemanly surgeons there congregated, and I am happy to say that I never spent three days more pleasantly. The hospital arrangements, so far as circumstances will permit, are excellent. They are generally well ventilated, admirably arranged, and perfectly neat and orderly in every respect. I was most happy to see that our brave soldiers were so well cared for and so kindly treated; also that the same kindness was extended to the Confederate soldiers who were so fortunate as to fall into our hands. In this respect no distinction was made; friend and foe, side by side, equally well cared for. The surgeons there in charge impressed me most favorably, as able and judicious. Among the most able and experienced were Drs. Hewitt and Lewis, of Connecticut, and Dr. Mosely, then Medical Inspector for New York.

"But still I felt there was need of more men of age and experience, to do those very things pointed out by the Boston surgeons, with the exception that they should not be allowed to decide upon or designate the one to perform the operations. Such an arrangement, I am satisfied, would operate injuriously, as it would lead to favoritism, and would go far to discourage and dissatisfy the younger surgeons who go there for experience. Almost any one can amputate a limb, and, with a little advice, can do it well. Older men are required rather as consultants, and to give advice in regard to the medical treatment of the sick and wounded. The Surgeon-General, in reply, says: Very few first class surgeons have come forward, and he appears to be rather surprised that they have not. The reason, in my opinion, is plain. Men of age and experience are generally physically incapable of following a regiment and enduring the hardships of camp life; besides, they are generally in the enjoyment of a good practice, which they do not feel disposed to leave without a corresponding compensation. Then, again, this class of men have been long from the schools, and in regard to minute anatomy have forgotten much; but on the cadaver they will show you at once that they are at home in anatomy, so far as necessary for usefulness. These men do not like to go before a board of examiners, who have only good memories, and submit to an examination in minutiæ which are of no practical importance, and which have escaped them. These men are well known to the profession by their contributions to the medical and surgical literature of the day, and are personally known to many of our ablest surgeons and professors. There are many such men of acknowledged ability as surgeons, who would be willing to serve their country if they could be appointed by giving the best of references, or certificates of qualification, but will never enter the service if they have to go through the red-tape process. In regular service, where young men alone are permitted to enter, this course would not do, but in the volunteer service great efficiency could be given to the medical corps in this way. A committee of men of world wide talent from each State could designate such men as would be suitable."

THE SHEPPARD ASYLUM AT BALTIMORE, MD.—The following notice of a new lunatic asylum to be established at Baltimore, is from Dr. C. A. Lee's interesting European Correspondence, published in the *American Medical Times*. He had just visited an insane hospital at Clermont, in France, which he describes, and adds—

"I was accompanied in my visit, as I have also been to several other asylums, by Dr. Brown, of the Bloomingdale Insane Asylum, near New York, who is inspecting similar institutions in Europe, at the request of the Trustees of the Sheppard Asylum at Baltimore, Md. This institution was founded by the late Moses Sheppard, a wealthy merchant of the Society of Friends, who, several years before his death, conceived the project of testing the curability of unfavorable cases of insanity, by a more liberal expenditure of money than the friends of most asylums would reasonably permit. To this end Mr. Sheppard, having no relatives, left his whole fortune, amounting to six hundred thousand dollars, to found and maintain an experimental institution for one hundred patients. After several years of careful consideration, the Trustees of the Sheppard Asylum have commenced the construction of their building, on a plan submitted by Dr. Brown, who now studies the organization and management of European asylums, to report whatever may serve to carry out the humane purposes of the benevolent founder of this unique institution. Dr. Brown, after having visited the most celebrated asylums in Great Britain, Holland, Germany, Switzerland, and France, expresses regret at having found, thus far, but inconsiderable rewards for the liberality of the Board he represents."

THE following order has just been sent out by the Surgeon-General. It is undoubtedly a wise one, so far as the regulating the number of beds to be placed in any hospital when originally organized goes. The difficulty is to keep the number of patients down to the standard proposed. We were recently at Fortress Monroe when this order was received at one of the large hospitals of that station. Measured by its requirements it was already greatly overcrowded; and yet the Medical Director did not hesitate to send in great numbers of patients sick with typhoid fever and measles from the ships of Gen. Banks's expedition lying in the roads, who filled the buildings to excess. The ventilation was generally good, owing to the special care of the officers, although the air space was, in many instances, hundreds of feet per man less than the prescribed quantity. Necessity knows no law.

"SURGEON-GENERAL'S OFFICE,
WASHINGTON, November 24, 1862.

"The Surgeon-General directs that the minimum allowance of cubic feet of space for patients in tents and military hospitals shall be as follows:

"1st. In all rooms ventilated by windows at the end or one side only, 1200 cubic feet per man.

"2d. In all hospitals constructed after plans approved by the Surgeon-General (pavilions with ridge ventilation), 600 cubic feet per man.

"3d. In all other buildings occupied as general hospitals, 800 cubic feet per man.

"The maximum number of patients allowed in a hospital tent shall be five in winter and eight in summer.

"By order of the Surgeon-General,
JOSEPH R. SMITH, *Surgeon U.S.A.*"

EARLY MARRIAGES.—From the interesting figures which Mr. Hermann Merivale has collected concerning the population of France, we may draw some good illustrations of the importance of early marriages to the well-being of the individual and for the progressive strength of the nation. The rate of mortality in France has not increased since the beginning of this century; the number of marriages has not diminished, it has remained stationary. Nevertheless the population of France has remained stationary, while our own has enormously increased. The "prudential check" on births has operated through later marriages, owing to the want of outlet for population by emigration. The result of this tendency to late marriages in France is, that the average fecundity of such unions is far below that in this country, and is steadily but slowly diminishing. Here the annual rate of fertility may be represented by 4.5. In France it has been, in 1822–31, 3.64; 1832–41, 3.41; 1842–51, 3.19; in 1855 it had fallen to 2.96; in 1856 it rose to 3.11. Nothing can bring out more clearly the unnatural and deteriorating influence of late marriages. Every physiologist and every physician knows that in proportion as advanced age operates to limit the number, so also does it affect the development and force of the children. The scanty offspring of late marriages will always, man for man, present a marked inferiority in physical qualities to the more numerous race springing from young and healthy parents. There are accessory conditions engendered by this state of society, this "prudential check" upon marriages, which increase the evil. The irregularities of unmarried youth too often taint the blood and sap the force of the procrastinating husband; the irregular unions which abound in France are as notoriously infertile as they are dangerous. In this country, modern habits of luxury threaten to have an operation only less dangerous because more limited than the "prudential check" arising in France from an absence of outlet by emigration. The figures which we quote afford striking illustrations of its dangers, and should give a fresh impulse to statesmen and moralists in combating the tendency to late marriages.—*Lancet.*

TRACHEOTOMY TUBE DROPPED INTO THE LEFT BRONCHUS.—At a recent meeting of the Medico-Chirurgical Society of Edinburgh, Mr. Spence mentioned the particulars of a rare accident which had come under his notice. A man had had tracheotomy performed several years ago by Mr. Edwards, and had since worn a double tube. Yesterday, while riding on horseback, the rim of the tube, which had been gradually wearing, gave way, and it fell, as the man expressed it, "into his chest." The man went at once to Mr. Edwards's house, but as that gentleman was from home, his assistant put in another tube and sent him to the hospital, where he came under Mr. Spence's care. When Mr. Spence saw the patient he was breathing quite freely, and the sounds on auscultation were very much the same on the two sides of the chest. A probe was in the first instance passed down into the right bronchus (into which it was generally said that foreign bodies fell) but nothing was felt; it was then passed into the left bronchus, and the tube was at once felt. An attempt was then made to extract the tube without enlarging the wound, but was unsuccessful. Chloroform was then administered, the opening was enlarged by cutting through two or three of the rings of the trachea, a pair of bent forceps was introduced, the tube was seized, drawn to the opening, and then extracted. Mr. Spence observed that so far as he knew this was the only case of the kind, but it should teach cutlers to make their tubes in two lateral halves and then join them together; for when, as at present, the shield was fastened to the tube, the soldering must in course of time give way.—*Edinburgh Medical Journal.*

DIET IN THE BRITISH ARMY.—Dr. Gibson, the Director-General of the Medical Department of the Army, has represented that the daily ration of meat allowed to the soldier is insufficient to enable him to support the fatigue of duty, and recommends that the supply be increased from three quarters of a pound to a pound daily.—*Lancet.*

Fattening Cattle on Cod-Liver Oil.—A farmer of Haubourain, France, has just tried the experiment of fattening cattle by the use of cod-liver oil. The trial was first made upon two calves, eight sheep and two pigs. The result surpassed all expectation. In ninety days they were all in prime condition, the flesh being perfectly white and of easy digestion. The quantity given was—to the pigs sixty-three grammes (two ounces) per day, to the sheep thirty-one grammes, and to the calves fifty grammes. For the calves the oil was mixed with bran and chopped straw, for the sheep with bruised beans, and for the pigs with their regular food.—*Living Age.*

Inefficient Examination of Recruits.—The following extract from a letter, purporting to be from a surgeon of one of the regiments which lately left this State, confirms the truth of the remarks which we have so often had occasion to repeat respecting the duties of examining surgeons:—

"Our greatest trouble is with men who should never have passed the examining surgeons of the towns, and if I had been able to inspect the regiment further, I would have thrown out twenty-five men. As it is I have made out some twenty certificates for disability. Among those passed were, one well known to have epileptic fits, five cases of hernia, three varicose legs, one chronic rheumatism, with knee joint spoiled, one deficient in intellect, one without a sound tooth, and one marked case of phthisis. I think the physicians who examined these men were more anxious to please their selectmen than to serve their country. The towns paid bounties to such specimens, and saved the obloquy (?) of a draft by sending such burdens into the field. It is amazing how many of our men were never stripped at the examination, which was very often by 'word of mouth' only."

VITAL STATISTICS OF BOSTON.

For the Week ending Saturday, December 13th, 1862.

DEATHS.

	Males.	*Females*	*Total*
Deaths during the week, ...	47	33	80
Average Mortality of the corresponding weeks of the ten years, 1851-1861,	33.3	33.2	66.5
Average corrected to increased population, ...	..	..	72.7
Deaths of persons above 90, ...	0	0	0

Mortality from Prevailing Diseases.

Phthisis.	Chol. Inf.	Croup.	Scar. Fev.	Pneumonia.	Variola.	Dysentery.	Typ. Fev.	Diphtheria.
15	0	2	0	7	1	1	1	1

Received.—The Dentist's Memorandum: a Book of Engagements, and Manual of Ready Reference, for 1863. By C. H. Cleaveland, M.D. Cincinnati: Bradley & Webb, Printers.

Deaths in Boston for the week ending Saturday noon, December 13th, 80. Males, 47—Females, 33. Accident, 3—anæmia, 1—apoplexy, 3—disease of the bowels, 1—inflammation of the bowels, 1—disease of the brain, 2—inflammation of the brain, 2—bronchitis, 2—cancer of the womb, 1—consumption, 15—convulsions, 1—croup, 2—debility, 1—delirium tremens, 1—diphtheria, 1—dropsy, 2—dropsy of the brain, 2—dysentery, 1—erysipelas, 2—fever, 1—typhoid fever, 1—typhus fever, 1—disease of the heart, 2—infantile disease, 1—intemperance, 1—disease of the liver, 1—congestion of the lungs, 1—inflammation of the lungs, 7—marasmus, 2—old age, 3—paralysis, 3—premature birth, 1—puerperal disease, 1—rheumatism, 1—sore throat, 1—smallpox, 1—tumor (of the abdomen), 1—unknown, 6.

Under 5 years of age, 24—between 5 and 20 years, 5—between 20 and 40 years, 18—between 40 and 60 **years, 18—above 60 years, 15. Born in the United States, 52—Ireland, 25—other places, 3.**